

*Ectoedemia (Dechtiria) erythrogenerella*  
(de Joannis, 1907) (Lep. : Nepticulidae).

A Species New to Britain

By A. M. EMMET

On the 21st of October, 1973, I visited Portland, Dorsetshire in company with Mr S. C. S. Brown. Earlier that day we had been collecting mines of *Nepticula auromarginella* Richardson in its locality near Weymouth. Richardson never succeeded in finding *auromarginella* at Portland, so we set about searching the brambles there to see if the moth had extended its range since his day. Instead of *auromarginella*, we found a Nepticulid mine which I did not recognise. I showed it to Mr Brown and he knew it at once to be *erythrogenerella*, since he has similar mines in his herbarium, sent to him from Austria by Dr J. Klimesch. We extended the range of our search and found the mines to be quite numerous, the majority of them still being tenanted by larvae.

A few days later Mr Brown took further examples at Swanage, about 20 miles east of Portland. Then on the 24th November I found *erythrogenerella* once more, this time at South Benfleet in Essex. Even at that late date some of the mines were tenanted, and the last larva from those I collected did not leave its leaf for pupation until the 8th of December. More recently, on the 8th of February 1974, I was in the Dungeness area and hastily picked a few crimson-spotted bramble leaves in the rain. On my return home, I found that one of them contained a vacated mine of *erythrogenerella*. A common feature of the four localities is that they are close to the sea. It is 150 miles from Portland to Benfleet, and this suggests that *erythrogenerella* may be widespread in warm sheltered spots all along the south coast of England.

The type locality for *erythrogenerella* is Vannes, on the south coast of Brittany and only 200 miles from Portland; so there is nothing surprising in its occurrence in Dorsetshire. But it is hard to believe that it has been present in the country for long. Dorsetshire is the best-worked county in Britain for Nepticulidae with records for over 70 species; this is because such well-known micro-lepidopterists as Bankes, Dale, Richardson and Pickard-Cambridge were resident there. They did not miss much, and special attention has always been paid to the mines on *Rubus* since Richardson's discovery of *auromarginella* in 1890. Had *erythrogenerella* been present at that period, it could hardly have escaped notice.

It is idle but tempting to speculate how it reached Britain. Given a good tail-wind, could it have traversed the 75 miles or so of channel? Or did it hitch-hike, perhaps via the Channel Islands and the Weymouth steamer? A parallel case is that of *Nepticula suberivora* Stainton. Of all British Nepticulids, this makes the most conspicuous mines for they are broad

galleries in the evergreen leaves of the holm oak, and as they weather with the passage of time, they turn white and become even more prominent. This species was first found in the Isle of Wight by Waters in 1927, and it is inconceivable that it had been overlooked for more than a brief period prior to that date. It, too, was the first found on a stretch of coastline facing France, yet at the same time, not far from a ferry-port.

An account of *erythrogenerella* follows. The adult is described from six specimens bred at Vannes and presented by de Joannis to the British Museum (Natural History). The description of the early stages is based on my own British material.

Imago. Wingspan 5 mm. Head and collar dark fuscous. Antennal eyecaps shining white. Forewings coarsely scaled, blackish; a shining white spot on the middle of the costa, and a similar spot beyond it on the dorsum, sometimes uniting to form an outwardly oblique fascia; terminal cilia white with a dark line at their base. Hindwings pale grey. It is very similar to *E. albifasciella* Heinemann, but that species has a ferruginous head. It also resembles *E. rubivora* Wocke, but may be told by the outward slant of the white spots or fascia.

Ovum. Laid on or beside a rib on the upperside of a leaf of bramble (*Rubus fruticosus* agg.).

Larva. Dirty greyish white except for the three anal segments which are yellowish; a conspicuous chain of pear-shaped dark spots along the venter. Head and prothoracic plate dark brown. The young larva has the head paler and a row of large, roundish dark spots on the venter similar to those found on *E. quinquella* Bedell and shed in a similar manner. The larva mines venter upwards.

Mine. At first a slender gallery following a nervure, which soon turns back and follows a contiguous course; this process may be repeated a second or third time. Eventually the gallery widens into a blotch, which sometimes fills the space between two nervures. The whole area of the leaf in which the mine is placed turns bright crimson-purple and it was to draw attention to this character that de Joannis named the insect "*erythrogenerella*".

Cocoon. Dark brown with a violet tinge. In captivity it is often spun on the upper surface of a leaf of the foodplant.

The species is probably single-brooded like the rest of our *Ectoedemia*, with the adults flying in June. It occurs on the continent in France, Switzerland and Austria.

I am indebted to Mr S. N. A. Jacobs for the accompanying drawings of the mines of *erythrogenerella*.